IMF Committee on Balance of Payments
Statistics

BPM6 Update Direct Investment Task Team (DITT)

Approved/Final Version

D.6 Ultimate Investing Economy/Ultimate Host Economy and Pass-through Funds

D.6 Ultimate Investing Economy/Ultimate Host Economy and Pass-through Funds¹

Complex financing and ownership structures of multinational enterprises can "inflate" direct investment (DI) flows and positions as each flow into and out of each economy is counted even if the funds, or income, is just passing through. This can make it difficult to interpret DI statistics and does not provide information on the ultimate sources and destinations of DI when the statistics are compiled by immediate partner economy. The note recommends the development of supplemental presentations of DI statistics by ultimate partner economy and identifying pass-through funds to greatly enhance the interpretability and usefulness of DI statistics. The paper discusses different definitions of the ultimate investing and ultimate host economies, identifying a preferred method for each and proposing a ranking for the methods within the ultimate investing economy concept. It also recommends a presentation by residency of the ultimate investor as an indication of funds and income passing through an economy.

SECTION I: THE ISSUE

BACKGROUND

- 1. Direct Investment (DI) statistics seek to measure "investment that reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor. The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise." (the Benchmark Definition of Foreign Direct Investment, fourth edition, 2008 (BD4), glossary). The motivation of the direct investor is strategic, including to access markets or key inputs or to take advantage of factor cost differences between economies. However, the increasingly complex financing and ownership structures of multinational enterprises (MNEs), resulting from multiple M&As involving the same company, or driven by factors such as tax optimization or the use of regional headquarters, also play a role in DI relationships. This latter form of DI often involves MNEs channeling investments through several economies, resulting in a large portion of DI flows in some countries being flows going in and out of the country on their way to their final destination (Blanchard and Acalin, 2016). This can make it difficult to interpret DI statistics and does not show the ultimate sources and destinations of DI when the statistics are compiled by immediate partner economy.2
- 2. **Some economies publish supplemental DI statistics to address these issues.** One such presentation is of inward DI positions by ultimate partner. The compilation of inward and outward DI

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² DI statistics on an immediate partner basis are useful to know where financial claims and liabilities are created and held; those on an ultimate partner basis provide information on who makes the underlying investment decisions and who needs to hold sufficient capital to cover potential losses.

statistics by ultimate investing economy (UIE) and ultimate host economy (UHE) respectively provides valuable information to analysts and policymakers on (OECD, 2019a):

- who ultimately owns or controls the investment, reaps the rewards and bears the risk of the investment;
- analyses of globalization by highlighting the ultimate destination of the income generated from integration in Global Value Chains (GVCs);
- revealing the financial linkages and interdependencies between economies that are not evident in the statistics by immediate investing economy.

UIE/UHE-based statistics provide valuable information for policymakers, including on their most important investing partners. Information on pass-through economies sheds light on the extent to which businesses use offshore centers and can inform the development of policies to encourage businesses to record the related income in the country where it was generated.

- 3. **UIE/UHE-DI based presentation often shows a significantly different picture of the most important direct investors in an economy.** Seventeen economies report inward DI positions by immediate and ultimate investing economy to the OECD.³ When comparing the two, the United States, the United Kingdom, Germany, Japan, Canada, and France all become larger sources of DI by UIE while the Netherlands, Switzerland, Ireland, and Luxembourg become smaller sources (OECD, 2018). While some economies have made efforts to compile outward DI statistics by UHE, these statistics are not widely published.
- 4. **Pass-through funds are significant.** For instance, (Damgaard, Johannesen and Elkjaer, 2019) finds that at end-2017 around 40 percent of global DI were into Special Purpose Entities (SPEs), which have little or no real links to the local economy. While SPEs are an important channel for pass-through funds, they are not the only one. As such, SPEs represent only a portion of the pass-through funds, and their portion is likely declining due to efforts to encourage MNEs to better align where they report income with where they have economic activities. The OECD estimates that the amount of pass-through funds in operating affiliates, rather than in SPEs, is quite significant, accounting for about one-quarter of the inward DI positions in a selection of European economies (Borga and Caliandro, 2018).
- 5. In the current international standards, pass-through funds are included as any other flow of investment, therefore the classification by partner economy is based on the economy of the immediate investor. While the *Balance of Payments and International Investment Position Manual, sixth edition (BPM6)* states that supplementary data on DI transactions and positions may be prepared according to ultimate source and host economy and immediate economies excluding pass-through funds (*BPM6*, paragraph 4.156–157), both ultimate partner and pass-through funds were included in the research agenda (paragraph 1.43). The *BD4* recommends a supplemental presentation by UIE for inward DI positions, in which the entire inward DI position is reclassified to the economies where the investors

⁴ Some economies report a growing presence of "near SPEs," which combine the activities of SPEs with a small, but real, presence in the host economy (IMF, 2017 Task Force on SPEs report). The capital passing through "near SPEs" is not captured in the statistics of DI to and from resident SPEs because these entities do not meet all of the SPE criteria.

³ http://stats.oecd.org//Index.aspx?QueryId=64224

controlling these positions are established (*BD4*, paragraph 280 and 610 to 617). DI positions allocated according to UHE were put on the *BD4* research agenda (*BD4* paragraph 668 to 671).

- 6. The BPM6 and BD4 both discuss pass-through funds, also called capital-in-transit. The concept of pass-through funds is described in the BPM6 (paragraph 6.33) as: "funds that pass through an enterprise resident in an economy to an affiliate in another economy, so that the funds do not stay in the economy of that enterprise. These funds are often associated with direct investment. Such flows have little impact on the economy they pass through. Special purpose entities, holding companies, and financial institutions that serve other nonfinancial affiliates are particularly associated with funds in transit, but other enterprises may also have pass-through funds in direct investment flows." The BPM6 recommends that those funds be included in DI to ensure full coverage and accuracy of financial flows for balance of payments purposes, as well as to ensure symmetry and consistency among economies (paragraph 6.34). The BPM6 acknowledges that identifying pass-through funds could be valuable but, in absence of a standard definition, recommends that economies with large amounts of pass-through funds compile supplementary data on funds in transit using national definitions (paragraph 6.34). The BD4 addressed the challenge raised by pass-through funds by recommending that DI associated with resident SPEs be separately compiled and that the extended directional principle⁵ be used to better capture the direction and degree of influence and to remove double-counting in DI statistics when debt and equity pass through fellow enterprises. Nevertheless, the BD4 recognized that these were only partial solutions. As such, it included the topic of capital-in-transit as the first item in its research agenda.
- 7. Due to the difficulties that complex MNE ownership structures create in DI statistics, supplemental presentations of DI statistics by ultimate partner economy and identifying pass-through funds would greatly enhance the interpretability and usefulness of DI statistics. The BD4 recommends the extended directional principle for the compilation of DI statistics by partner economy because it is more appropriate for analyzing the motivations and nature of DI between economies. The IMF's Coordinated Direct Investment Survey uses the extended directional principle. It is, therefore, recommended that the directional presentation of DI statistics be used for the supplemental presentations by UIE and UHE because it reflects the direction and degree of influence. As discussed above, the current standards are limited to UIE. This topic is closely related to other issues for the update, including reconciling DI and Activities of Multinational Enterprises (AMNE) statistics (D.9), the nationality concept (B.1), and the treatment of MNEs and SPEs in the national accounts by the Globalization Task Team.

ISSUES FOR DISCUSSION

8. UIE. To assign inward DI positions to a UIE, it is necessary to define the most appropriate concept of ultimate investor to be used in compiling the statistics. Several concepts of the ultimate investor have been developed for statistical, financial accounting, and regulatory purposes, including the ultimate controlling parent (UCP), ultimate beneficial owner, ultimate controlling institutional unit, and ultimate investor (see annex Table A.1 for various definitions). As such, it is necessary to identify the most

⁵ The *BD4* recommended extending the directional principle to the treatment of assets and liabilities between fellow enterprises. If the ultimate controlling parent (UCP) of the fellow enterprise is resident in the same economy, then assets and liabilities by and to the fellow enterprise are treated as outward investment; they are treated as inward investment if the UCP is nonresident.

appropriate concept to use for compiling DI positions and income by UIE.⁶ A consistent choice across different sets of statistics would simplify the work of compilers, enhance international comparability, and may make the statistics easier to understand for users.

- 9. In compiling DI statistics by UIE, economies have generally used two different approaches to reallocate the DI position from the immediate to the UIE: the proportional approach (PA) and the control approach, also called "winner takes all" (WTA). PA is the method recommended in the *BD4* and relies on identifying the entity that controls the direct investor, and, thus, identifies the entity that makes the DI decision. WTA identifies the entity that controls the direct investment enterprise (DIE) using the concept of the ultimate controlling institutional unit recommended in Eurostat's Manual on Foreign AffiliaTes Statistics (Eurostat, 2013). Annex I paragraphs 3 to 7 and table A.2 compare and contrast the two approaches.
- 10. International Financial Reporting Standards (IFRS) consolidation method could be an alternative to PA and WTA as it is widely used by MNEs, and, so, would not lead to additional reporting burden for companies and the need for double accounting. IFRS 10 establishes principles for preparing consolidated financial statements when an entity controls one or more other entities, including defining the principle of control, how it is applied, and the accounting requirements for preparing consolidated financial statements.⁸ However, the IFRS consolidation removes the intra-firm transactions and positions that are what is measured by DI statistics. Nevertheless, it could be useful for units to identify the MNE that controls them.
- 11. UHE. Complex ownership structures can lead to a misallocation both geographically and by economic activity of the DIE in outward DI statistics, most prominently through holding companies or SPEs in a third economy. This can make it difficult to use outward DI statistics by immediate host economy to understand the geographic and economic activity patterns of domestic MNEs' offshoring. Such statistics would also help better illustrate the financial interdependencies between countries. For example, knowing the amount of investment by UHE provides important information on how the risks of domestic direct investors are spread across countries and regions. MNEs do not always channel their investments through a single holding company or SPE but instead through a large number of companies (holding/SPE chains as well as operating units) until it reaches the actual investment interest. Since the holding/SPE chains do not make an actual economic contribution to their host

⁶ It should be noted that many countries already have information on the residency of the UCP of their direct investment enterprises to apply the extended directional principle to positions and flows of fellow enterprises and would like to use this information in their statistics by UIE. While there may be other concepts of the ultimate investor, such as the ultimate beneficial owner, that better reflect who ultimately owns the DI asset and where the income ultimately accrues, a possible first step (but second best approach) could be to use the UCP information that countries already collect. For example, the data collection template for SPEs developed by the TFSPE uses the residency of the UCP to identify income of SPEs ultimately accruing to residents of the economy from that ultimately accruing to nonresidents.

⁷ A fully proportional approach would reflect the full ownership structure up the chain, but the information demands of this are very high. The method discussed here is recommended in the *BD4* as being more tractable while still being closer to the measurement of financial variables.

⁸ For information on IFRS: https://www.ifrs.org/, and for more information on IFRS 10: <a href="https://www.ifrs.org/issued-standards/list-of-standards/li

economy, it would be valuable to identify the economy in which the operating (productive) DIE(s) is located.

- 12. To generate geographical and sectoral information for the ultimate host economy, the outward DI should be reallocated from the immediately held subsidiary to the economy(ies) and economic activity(ies) of the subsidiary(ies) below it in the chain. The following are possible approaches for the reallocation: (1) To show how the influence of the ultimate direct investor flows down the investment chain using balance sheet information and ownership shares at each link in the chain; (2) To use the value the direct investor would receive if that subsidiary were acquired by another enterprise; that is, measuring the ultimate investor's position in the DIE in the specific economy where it is located; (3) To define the UHE as the last economy in the chain; and (4) To define the ultimate host economy as the first operating unit even if it is not the end of an investment chain. Annex I paragraphs 8 to 10 discuss these concepts further.
- 13. Pass-through funds. Pass-through funds are funds that flow into a host economy that are then invested in a subsequent economy. Identifying these flows in practice is complicated. Entities receive financing from a variety of sources and use it in a variety of ways, especially operating affiliates, which can blur the relationship between the inward and outward flows. Several economies have presented methods they use to separately identify pass-through funds in their DI statistics to the OECD WGIIS.⁹ These methods varied in their resource and data intensity as well as in the broadness of their definition of pass-through funds.
- 14. One possible presentation to shed light on the extent of pass-through in an economy used the residency of the ultimate investor. This method could also be useful for supplemental accounts by nationality. Pass-through funds in an economy are carried out by foreign-owned parent firms; that is, it is carried out by entities that are in the middle of the chain and are both DIEs and direct investors. A simple breakdown of the outward DI positions and income based on the residency of the ultimate investor would give an indication of the amount of funds and income passing through that economy. Adding in information on the residency of the ultimate investor for inward positions and income would shed light on round-tripping. Table 1 shows a potential breakdown. A identifies the amount of round-tripping in the economy. E represents the amount of outward investment by domestic MNEs. G represents the amount of outward investment by foreign-owned direct investors—an indication of the amount of their inward investment that has passed through the economy. ¹⁰ C represents the inward investment by foreign investors while C less G would give an indication of how much of this remains in the host economy.

⁹ Those methods included: the examination of individual company data to identify companies with inflows and outflows in the same period (Hungary, see Montvai, 2016); the linking of FDI statistics to data on the gross fixed capital formation of foreign-owned firms (Finland, see Leino 2014); separately identifying the capital outflows of foreign-owned parent companies (Austria and Switzerland). Poland also presented a method to identify pass-through funds in all functional categories (Kocerka and Makowski, 2017).

¹⁰ This ignores the possibility of negative investment positions as well as of external financing raised by the foreign-owned direct investor.

Table 1. Breakdown of Inward and Outward Investment by Residency of the Ultimate Investor

	Inward DI		Outward DI		
	Position	Income	ncome Position Inc		
If ultimate investor is resident	(A)	(B)	(E)	(F)	
If ultimate investor is nonresident	(C)	(D)	(G)	(H)	

- 15. **Extending the breakdown to DI income would give an indication of the extent of pass-through income.** Income can pass through an economy just as funds can. For inward DI income, the breakdown would identify income payments that ultimately round-trip back to the economy (B) from those that leave (D). Such a breakdown of DI income was proposed in the Final Report of the IMF/OECD Working Group on Balance of Payments Statistics Relevant for GVC Analysis (WG-GVC).¹¹
- 16. Annex tables A.3 and A.4 show how the breakdown by UIE and UHE can be combined with the breakdown by residence of the ultimate investor. The two presentations would show the most important ultimate investors in the economy, an indication of the extent to which they use the host economy for pass-through, the amount of round-tripping, and the most important destinations for outward investment by domestic direct investors. The Direct Investment Task Team (DITT) did not make a specific recommendation on a template at this stage given the connections to issues being discussed in the DITT, Current Account Task Team (CATT), Balance of Payments Task Team (BPTT), and Globalization Task Team (GZTT) and the potential implications of these for the concepts of UIE, UHE, pass-through funds and their presentation.

SECTION II: OUTCOMES

17. Include a supplemental presentation by UIE, UHE, and identifying pass-through funds in the update. To support cross-country comparability, the update should recommend the WTA as the preferred approach for the UIE, and the reallocation of positions to the first operating unit(s) for the UHE. These methods are preferred for practical reasons. The other methods should also be described in the update to help illustrate the concepts of UIE and UHE as well as to help guide their use and interpretation. In particular, for the UIE, the PA approach would be ranked as the second method, and the IFRS consolidation method would be the third. The presentation by UIE and UHE should be produced for position statistics and should be explored for income and transactions. The indicator of pass-through funds based on the residency of the ultimate investor should also be included as a supplemental presentation.

¹¹ The BOPCOM created the WG GVC at its 2017 meeting. The final report of the WG proposed the breakdown of DI income by residency of the ultimate investor to significantly improve the interpretive and analytical power of trade in value added databases and to better understand how economies benefit from their integration in GVCs. See the GN on trade by enterprise characteristics prepared by the Current Account Task Team for more information.

¹² A summary of the Balance of Payments Committee of this GN is available here.

18. The development of the supplemental presentation should be coordinated with other Task Teams (TTs) and across manuals. It is important to take into account that the issues in this note relate to other topics being discussed within the DITT, such as issue D.9 on reconciling DI and AMNE statistics, as well as in other TTs, including the BPTT, CATT, and GZTT. ¹³ Because both compilers and users would benefit from common concepts across these data sets to a reasonable extent, the outcomes of those notes could inform the choice of concepts recommended in this note and vice versa. For example, the possible collection of some financial variables on DI surveys which is discussed in the GN on issue D9 could also be relevant to the presentation by UHE. It would also help to promote consistency and comparability across countries. DITT members also raised the issue that it would be desirable for these statistics to create meaningful regional aggregates and for the UIE and UHE to be symmetric. As discussed in the annex, this would not only imply the use of symmetric concepts for the UIE and UHE but also that pass-through funds be separately identified so that it could be excluded. ¹⁴

19. The recommendations include:

- Develop a supplemental framework for the statistics by UIE, UHE, and pass-through funds. Primarily,
 the supplemental framework will be applied to the development of DI statistics by UIE and UHE that
 could be used in turn to derive aggregates on pass-through funds (Table 1 above). The links of this
 framework to the research on the nationality concept and the presentation of MNEs in the accounts
 should be explored.
- Streamline the definitions of all concepts in order to include clear and unambiguous terminology in the manual. More specific recommendations would probably come up after the consultation with other TTs.
- Encourage data-sharing at the micro-level and the development of detailed data on MNEs that are widely available should be encouraged to facilitate the compilation of these statistics.
- Develop in collaboration with GZTT a template for recording the data on UIE, UHE, and pass-through funds for positions.

REJECTED ALTERNATIVES

20. A definition of pass-through capital and income that would have specifically measured the phenomena was rejected because it was complicated and information intensive. It measured pass-through capital and income and accounted for the possibility of negative investment positions as well as external financing raised in the reporting economy and can be found in Leino and Yrrko (2014).

$$PT_{j,t} = \min(I_{j,t}, O_{j,t}) \text{ if the } I_{j,t} \ge 0 \text{ and } O_{j,t} \ge 0$$

$$\tag{1}$$

=
$$\max(I_{i,t}, O_{i,t})$$
 if the $I_{i,t} < 0$ and $O_{i,t} < 0$ (2)

¹³ For information on the update of the BPM and other Task Teams, see: https://www.imf.org/en/Data/Statistics/BPM.

¹⁴ Annex 1, paragraph 14 gives an example of how the measurement of round-tripping can differ between the statistics by UIE and UHE. Annex 1, paragraphs 15 to 19 discuss how symmetric UIE and UHE statistics that can be aggregated because they avoid double-counting could be compiled.

Where I_{j,t} and O_{j,t} represent the inward and outward positions of the direct investment enterprise j in period t, respectively. Looking from the inward DI perspective, a foreign-owned enterprise with no subsidiaries would have no pass-through funds (O_{j,t} =0 under (1)). If it did have a foreign subsidiary, the amount of pass-through funds is the smaller of the inward and outward positions of the foreign-owned enterprise if both its positions are positive (under (1)) or negative (under (2)), and it is zero otherwise. Looking from the outward DI perspective, the same amount of pass-through would be identified for direct investors in the economy. The information for measuring pass-through in inward DI statistics should be available for economies compiling DI statistics using surveys by linking their inward and outward DI surveys, but would require additional information to identify pass-through funds in the outward DI statistics. It is noted, however, that if there is interest in developing consolidated measures of DI by UIE and UHE, this more complicated definition could be useful in removing the intra-firm positions and income and attributing them to the ultimate partner economy. This would be needed to present symmetric DI statistics by UIE and UHE without double-counting.

Annex I. Supplementary Information

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SUPPLEMENTAL INFORMATION ON UIE/UHE

1. **The ultimate investor is defined in different ways in different sets of statistics.** Table A.1 shows some of these different definitions and their sources.

Annex Table A.1. Different Definitions of Ultimate Investor and Their Sources

	Definition	Source of information
Ultimate investor	The enterprise that has control over the investment decision to have a DI position in the DI enterprise.	BD4, Annex 10 p. 210
Ultimate investing economy	The country in which the ultimate investor is resident is the ultimate investing economy.	BD4, Annex 10 p. 210
Ultimate beneficial owner (UBO)	The natural person(s) who ultimately owns or controls a customer and/or the natural person on whose behalf a transaction is being conducted; the person or entity that is the ultimate beneficiary when an institution initiates a transaction. An institutional unit that is at the top the ownership chain of a foreign-owned enterprise and is not controlled by any other institutional unit. The person, or entity, that ultimately owns or controls a U.S. affiliate of a foreign company and that derives the benefits associated with ownership or control. The UBO of a U.S. affiliate is that person, or entity, proceeding up the affiliate's ownership chain beginning with the foreign parent, that is not owned more than 50 percent by another person, or entity.	The Financial Action Task Force Recommendations (FATF) Statistics Finland U.S. Bureau of Economic Analysis
Ultimate controlling parent (UCP)	The entity on top of the ownership chain and which is not controlled by another entity.	BD4 and BPM6
Ultimate controlling institutional unit of a foreign affiliate (UCI)	The institutional unit, proceeding up a foreign affiliate's chain of control, which is not controlled by another institutional unit.	Foreign AffiliaTes Statistics Recommendations Manual, 3rd edition, Eurostat (FATS)

2. The *BD4* included a recommendation for identifying the ultimate investor that is commonly referred to as the proportional approach because it potentially identifies a different UIE for each direct investor. Alternatively, FATS and AMNE statistics use an approach that is based on control and identifies only one UIE for each direct investment enterprise; this is commonly called the winner takes all approach. The table below compares the guidance for each.

Annex Table A.2. UIC Concept from the *BD4*: Proportional or UBO Approach; Winner Takes All or AMNE/FATS Concept; and IFRS Consolidation Method

Approach	Source of information	Main idea
Proportional	OECD Benchmark Definition of	The approach is based on identifying the country of
Approach (PA)	Foreign Direct Investment 2008	the entity that exerts control over the direct investor
	Fourth Edition (BD4)	to identify the entity that makes the decision to
		investment, that bears the risks, and that reaps the
		rewards.
The winner takes	Foreign AffiliaTes Statistics	The approach is based on the concept of control of
all approach	Recommendations Manual	the foreign-owned enterprise.
(WTA)	(FATS), 3rd edition, Eurostat	
IFRS	IFRS/IAS	The approach is based on international accounting
consolidation		consolidation methods.
method		

- 3. **The PA has several advantages.** First, it better reflects the risk and reward aspects of DI because it is more consistent with financial statistics where the values are based on each direct investor's claim on the DIE. As such, it is suited to financial analyses, such as risk sharing, to identifying where the DI income ultimately accrues, and for analyzing who benefits from globalization. The PA deals better with influence relationships and joint ventures than the WTA, resulting in better measures of round-tripping ¹⁵ and the risks associated with implicit dependencies between economies. It gives the most accurate image of the distribution of DI positions and provides more information on the financial and ownership structure of the MNE. It is also helpful in identifying all of the countries that are benefitting from international trade and investment agreements.
- 4. Among its disadvantages are that the PA does not match the concept used in FATS and AMNE statistics, and, so, it makes it more difficult, or even impossible, to use those data sets together. It could also be confusing to users who are already familiar with the AMNE/FATS concept of ultimate controlling investor and may have trouble understanding the somewhat subtle difference between the two. From a compilation perspective, the lack of information, particularly on the ultimate owner of influence positions, can make it harder to implement. It could also be difficult to reconcile information from multiple direct investors in the same DIE.
- 5. The WTA approach is better for understanding who is making decisions regarding production in an economy and has as one of its key advantages that it is a step into aligning

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¹⁵ Round-tripping refers to domestic funds which leave an economy and return back as DI (Research agenda, Annex 13, *BD4*). It is unlikely that round-tripping brings the additional benefits associated with truly foreign investment. Statistics on the amount of round-tripping are useful for identifying if there is a problem with an economy's investment policy regime. In addition, round-tripping could have other negative consequences on the host/investing economy, such as reducing tax revenues or regulatory oversight by the host economy (Borga, 2016).

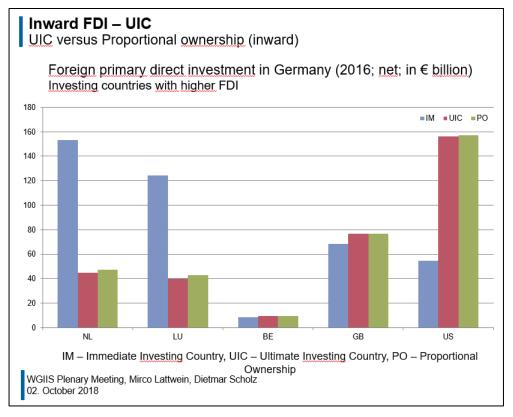
AMNE/FATS and DI statistics. This could be an important consideration if these statistics are to be used in the identification of foreign-controlled firms and domestic MNEs in the accounts. In addition, it might make sense to identify the country of the investor who controls the investment with the total amount of financing provided by foreign direct investors as they could determine the existence and size of any influence relationships. It would also enable the analysis of the links between foreign financing and the operations of the direct investment enterprises. WTA also have several practical advantages: it is easier to find information on the ultimate investor based on control of the DIE and statistical agencies may already have the information from the compilation of AMNE statistics. However, there are also some disadvantages. Since DI covers both influence (≥10 percent and ≤50 percent ownership) and control (>50 percent) relationships, it is not clear how to attribute influence relationships to a UIE. They could be left in the immediate investing country, assigned to the domestic economy if there is domestic control of the direct investment enterprise, or left unallocated. As a result, the WTA approach has difficulty measuring round-tripping because it could either miss round-tripping through minority investments or incorrectly label some true minority foreign investments as round-tripping, depending on the treatment applied to minority investments. One more disadvantage is that the WTA is not appropriate for income because it does not identify where the income from influence ultimately accrues.

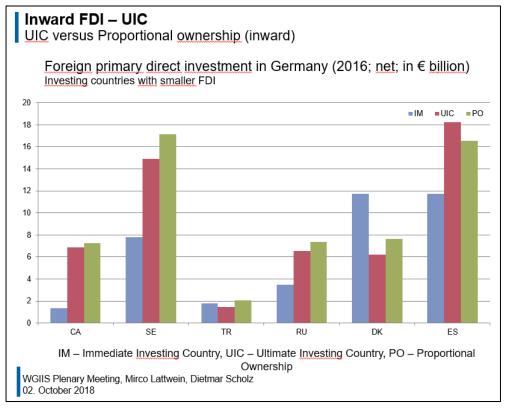
- 6. Essentially, the choice comes down to taking the financial perspective on the allocation to the UIE in the PA or what may be considered a more economic perspective from AMNE/FATS statistics in the WTA. In practice, there is likely little difference between the statistics classified according to the two concepts as demonstrated in Annex Figures A.1 and A.2, which shows the presentation of DI positions by UIE using the two different approaches (PA versus WTA) from Germany. The work of DI statisticians on compiling statistics by UIE could be used to inform the discussion on developing supplemental nationality-based statistics as well as on capturing the activities of MNEs in the accounts. Likewise, that work could inform the decision on which concept to use for supplemental DI statistics by UIE.
- 7. **Germany compiled statistics according to the two concepts to compare the results. While** it did not matter for the larger investing economies (Figure A.1), it did matter more for the smaller investing economies (Figure A.2). These results suggest that the WTA approach could be a good alternative to the PA recommended in the *BD4*. Poland and Denmark presented similar findings from a comparison of the two methods for attributing positions to the UIE.

¹⁶ The ESS/ESCB Task Force on FDI presented its proposal for a voluntary data collection of inward FDI statistics by UIE planned for Spring 2021. The adopted methodology for compiling the UIE is the PA, but it is indicated that the "control approach" (WTA) can be used if the former is not feasible (ECB and Eurostat, 2020).

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Annex Figures A.1 and A.2. German Experience (WGIIS Meeting, October 2–4, 2018, Paris, France. German Experience with Ultimate Concepts. From Reporting Framework to Data Publication)





- 8. The following provides additional discussion of the four possible approaches for reallocating the outward investment position of a country to the UHE discussed in the body of the paper (paragraph 12):
- To show how the influence of the ultimate direct investor flows down the investment chain using balance sheet information and ownership shares at each link in the chain. Such a method could require a considerable amount of information on the ownership structure of the entire MNE. It could also require adopting certain conventions in the recording given the fungible nature of financing. ¹⁷ This approach would provide the most detailed information on the financial structure of the MNE.
- To use the value the direct investor would receive if that subsidiary were acquired by another enterprise; that is, measuring the ultimate investor's position in the DIE in the specific economy where it is located. 18 This presentation would provide a comprehensive view of the foreign operations of an economy's direct investors, both those they own directly and those they own indirectly. This would result in statistics by UHE that are symmetric to the UIE. It would need to be determined if the value of the subsidiary should reflect only its value or the value of any entities below it in the chain. While the latter would be easier to collect, it would result in double-counting the value of entities lower in the chain as they would be reflected not only in their host economies but in the value of the host economies of subsidiaries above them in the chain. 19
- To define the UHE as the last economy in the chain. This method alone would not be able to reallocate a portion of the position in the immediate investing economy when the entity at the end of the chain is not large enough to support the whole outward position. It can also attribute the position to smaller entities, such as retail operations, at the bottom of the chain, passing over larger entities, such as manufacturing facilities.²⁰
- To define the ultimate host economy as the first operating unit even if it is not the end of an investment chain. This would place less burden on respondents and compilers while still moving outward DI from pass-through economies. A definition of operating unit would not simply be the first non-SPE but would rather identify the first unit whose purpose was not (only) administrative and/or management and/or holding assets to avoid reallocating positions to countries where these holding or administrative functions are prevalent.²¹ While this first operating unit can hold a further subsidiary,

¹⁷ Enterprises can receive financing from a number of different sources and can use that financing in a number of different ways, so it is not possible to trace from a specific source to a specific use. One possibility would be to assume that all sources of funding are used equally in all uses. An alternative would be to assume that intra-group financing is the primary source of funding for intra-group investments.

¹⁸ The DI position should reflect the market value of the direct investor's claim on the DIE, but the market value is often not available in DI statistics. Therefore, an approximation of the market value, such as Own Funds at Book Value, is used. The value used in the UHE statistics should coincide with the value reflected in the DI statistics included in the IIP.

¹⁹ Because the value of a DIE generally reflects its investment in the entities it holds, a method to identify and remove this would be needed to avoid double-counting, such as the one proposed in Borga and Caliandro (2018).

²⁰ Brazil published estimates in 2018 defining the UHE as the last entity in the ownership chain that did not control any other affiliate. Annex Figure A.3 presents the impact on the outward positions in selected partner economies.

²¹ If this definition of UHE is recommended, a formal definition of first operating unit can be developed as part of the related compilation guidance that would be needed.

Germany found that in their case the major part of the investment often remains in the first productive enterprise. It would be useful to learn if this holds for other countries. It would also be necessary to determine how to allocate positions across multiple affiliates when the SPE holds entities in multiple countries.

- 9. Any approach to statistics by UHE could take into account the work of economies to develop these statistics, including the experience from Eurostat's pilot studies. Given the complexity of ownership chains, statistical agencies may choose to explore the use of algorithms or modeling to allocate indirect holdings to UHEs in cases where complete and accurate information on ownership chains is not available. Therefore, there might need to be a higher tolerance for uncertainty in statistics allocating DI flows and positions to UHE. Countries have also found that it is easier to collect this information on the outward operations from domestically-controlled direct investors than from foreign-controlled direct investors. Therefore, limiting the presentation by UHE to domestically-controlled direct investors should be considered.²³
- 10. **Brazil published estimates by UHE in 2018.** Annex Figure A.3 presents the change in outward equity positions for selected countries as a result of reallocating the position from the immediate to the UHE. From a total of US\$357.9 billion of outward equity position in 2017, the compilation by ultimate host country leads to a reallocation in country positions of US\$84.2 billion as compared to the immediate country allocation. The definition, which looked through the ownership chain to the entity at the end of the chain, resulted in a significant portion of the outward position not being reallocated. The Central Bank cited two main reasons for this. First, some of the immediately held DI enterprises in tax havens are used to make portfolio investments, and, so, they were the final host economy for the direct investment even though the funds passed to other economies. Second, some of the outward DI position is ultimately held in economies along the chain, which were missed using this method.

²² Data exchange among countries at the micro-data level could alleviate these reporting burdens on companies and resource demands on statistical office (in line with G20 DGI-2 Recommendation II.20 "Promotion of data sharing"). In addition, the development of publicly available detailed data on the structure of MNEs, such as in the Legal Entity Identifier or as proposed in the OECD ADIMA database.

²³ This would have the additional benefit of removing the pass-through funds in the UHE statistics of economies hosting entities further down the chain.

US\$ billion

10 9.2
5 6.0
5 -2.7
-3.2
-4.2
-5 -3.2
-4.2
-6.6
-10
-15
-20

USA Canada Singapore Urugual Cermany Brazil

British Virgin Habrids Spain Austria

Retrieb Virgin Habrids Spain Austria

Annex Figure A.3. Brazil Experience Measuring Direct Investment by Ultimate Host Country

Source: 2018 Direct Investment Report, Banco Central do Brasil

Increase
 Decrease
 Net change

COMBINING THE UIE AND UHE WITH PASS-THROUGH FUNDS

11. Table A.3 shows how the presentation by UIE for both inward and outward DI could be used to shed light on not only the amount of investment from different partner economies but how much of that investment remains in the host economy. A and B represent the values of the inward and outward positions at the global level. C represents the amount of round-tripping in the economy, and D represents the amount of outward investment by domestic MNEs. E represents the total amount of inward investment from economy A in the reporting economy, and F represents how much the affiliates owned by investors in economy A in turn invest abroad, an indication of whether investors from A are using the reporting economy for pass-through.

Annex Table A.3. Inward and Outward DI Positions by the UIE

Economy of Ultimate Investor	Inward DI Position	Outward DI Position
Global total	(A)	(B)
Reporting economy (residents)	(C)	(D)
Economy A	(E)	(F)
Economy Z	(G)	(H)

12. The information on UHE can also be combined with information on nationality to give a complete picture of the outward DI from the reporting economy. This could be particularly important if the statistics by UHE are only compiled for domestic MNEs. A is the total outward position, and B and C

break it down between outward investment by domestic MNEs and by foreign-owned direct investors. The outward investment of domestic MNEs is further broken down by the UHE.

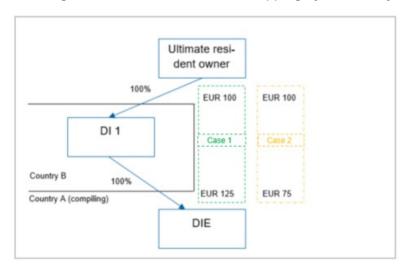
Annex Table A.4. Outward DI Positions by the UIE and UHE

Ultimate Partner Economy	Outward DI Position
Global total	(A)
Ultimate investor is non-resident	(B)
Ultimate investor is residents	(C)
Economy A	(D)
Economy Z	(E)

COMPILATION ISSUES

- 13. As countries have compiled statistics by UIE, a number of compilation issues have been encountered. These issues should be addressed in compilation guidance to accompany the recommendations in the update of the *BPM6*. These issues include:
- The problem of blurred ownership chains. Arises when all foreign direct investors of the reporting
 enterprise are not subject to immediate control by any entities (e.g., when there are multiple influence
 relationships).
- Special cases: It can be difficult to determine the residence of some direct investors even if their identity is known. These include collective investment institutions, individuals, tax havens, and offshore financial centers.
- 14. The statistics by UIE and UHE can result in different measures of round-tripping due to accounting conventions. Figure A.4 below shows that applying Own Funds at Book Value (OFBV) valuations might result in different values of round-tripping in outward and inward investment, which can be highlighted by the two cases in example. The values on the inward DI presented according to UIE will reflect the current valuation of the investment following either OFBV for unlisted or market value for listed companies. The valuation of the DIE in the host economy would reflect the reinvestment of earnings. For the outward DI following the standards, the OFBV of the SPE will be used, which—due to accounting practice—will often reflect the original (historical) cost of the investment and not the reinvestment of earnings. This leads to asymmetries between the UIE and UHE measures of round-tripping.





NEEDS FOR SYMMETRIC UIE AND UHE STATISTICS THAT CAN BE AGGREGATED TO REGIONAL AGGREGATES

- 15. Figure A.5 illustrates some of the challenges presented by pass-through funds in current DI statistics compilation. It presents the ownership diagram of a simple MNE structure consisting of five different enterprises in four different economies; A (in Economy 1, the UIE) is the ultimate controlling parent (UCP), and it owns B and C directly and D and E indirectly. For each entity and country, the figure shows an abridged balance sheet consisting of total assets, with the equity investments in foreign affiliates broken out; total liabilities; and owners' equity. The figure also shows the ownership chains and the percentage of ownership.
- Table A.5 shows the inward and outward DI positions that would be recorded under the extended directional principle; the outward positions are allocated to the immediate partner country, and the inward positions are recorded on both the immediate country basis and the UIE basis. The table shows that the inward and outward positions are globally additive, each summing to 340. However, the reallocation of inward positions to Economy 1, (the UIE), results in a total of 340 being recorded by Economies 2, 3, and 4 as inward investment from Economy 1, exceeding 1's total outward DI of 250 due to pass-through funds. Therefore, to calculate meaningful regional aggregates would require identifying and excluding pass-through funds. Moreover, under the extended directional principle, the loan between fellow Enterprises B and C is treated as a reduction in inward investment in B as the funds that flowed into Economy 2 from the fellow enterprises' common direct investor (Enterprise A) have flowed to another country (Economy 3). This loan does not give B any influence over the operations of C, and, so, should not be recorded as an outward investment. However, because it is recorded against the immediate partner economy, it does lead to an asymmetry in the bilateral inward and outward DI positions reported by the two countries.

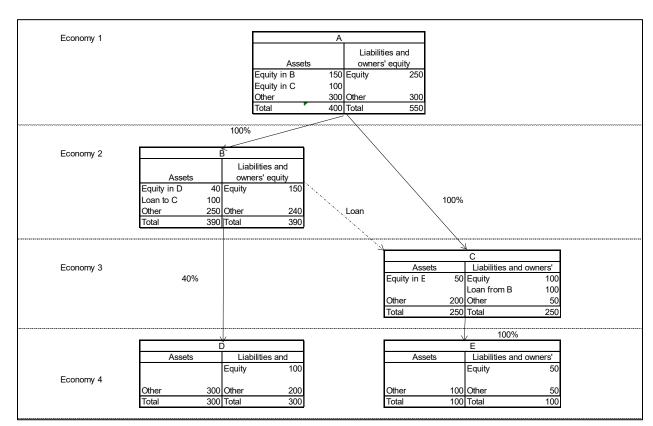


Figure A.5. Pass-Through Funds in a Simple Example of an MNE Ownership Structure

Table A.5. Inward and Outward DI Positions Under the Extended Directional Principle

		Reporting Economy										
Partner	Eco	nomy 1		Ecc	nomy 2		Economy 3			Economy 4		
country	Outward	Inv	/ard	Outward	Outward Inward		Outward	Inward		Outward	ard Inward	
	Immedi	iate	UIC	Immed	iate	UIC	Immedi	ate	UIC	Immed	liate	UIC
1	0	0	0	0	150	50	0	100	200	0	0	90
2	150	0	0	0	0	0	0	100	0	0	40	0
3	100	0	0	0	-100	0	0	0	0	0	50	0
4	0	0	0	40	0	0	50	0	0	0	0	0
Total	250	0	0	40	50	50	50	200	200	0	90	90

- 17. Table A.6 presents the results for the consolidated DI statistics in which pass-through funds have been netted out and positions reallocated to ultimate partner country. In this simple example, if countries were to separately identify the outward investment of the foreign-owned parents in their economy as pass-through funds and net it from both their outward and inward DI statistics, the pass-through funds would be eliminated.
- 18. **If the positions were also reallocated to the UIE**, then Economy 1 would still report outward investment of 250 but, now, Economy 2 would recognize that both the loan of 100 to C and the equity investment in D of 40 are pass-through funds and would net these from its inward and outward investment and the remaining inward investment would remain allocated to Economy 1, the economy of the ultimate investor A. Economy 3 would also recognize that the equity investment of 50 in E are

pass-through funds and net it from its inward and outward investment and the remaining inward investment would be reallocated to Economy 1. Economy 4 does not have pass-through funds and would reallocate its inward position to Economy 1. In this case, the only country with outward investment is Economy 1 since that is the economy of the domestic parent of the MNE; Economies 2 and 3 no longer have outward investment since all of their outward investment was from A, the foreign and ultimate controlling parent. As before, the statistics are globally additive but now the amount of inward DI attributed to Economy 1 (the UIE) is the same as its outward investment (250), reflecting the elimination of pass-through funds. This would enable the meaningful construction of regional aggregates because there would be no double-counting.

Table A.6. Inward and Outward Positions Under Consolidated DI Statistics by Ultimate Partner Economy

	Reporting Economy								
Partner	Economy 1		Economy 2		Economy 3		Economy 4		
country	Outward	Inward	Outward	Inward	Outward Inward		Outward	Inward	
1	0	0	0	10	0	150	0	90	
2	10	0	0	0	0	0	0	0	
3	150	0	0	0	0	0	0	0	
4	90	0	0	0	0	0	0	0	
Total	250	0	0	10	0	150	0	90	

19. If the UHE is defined as the country where the foreign-owned asset is ultimately located and the reallocation to UHE is based on the total intragroup funding that each foreign affiliate receives net of any intragroup funding it provides to fellow enterprises or its subsidiaries, then the DI positions by UHE would be symmetric to those by UIE and, so, can be derived using mirror relationships. Of course, ownership structures can be more complicated than presented in Figure A.5. For details on how these more complicated structures could be treated to compile symmetric UHE and UIE statistics would require consolidating DI positions and income within the MNE, see Borga and Caliandro (2018).